AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1-10. (Cancelled)

11. (Currently amended) A data storage medium comprising a magnetizable layer, wherein said magnetizable layer comprises a plurality of substantially uniformly spaced apart ferromagnetic particles, each having a largest dimension no greater than about 100nm, and wherein each of said ferromagnetic particles has been formed and is ~~are~~ at least partially encased within a cavity of an organic macromolecule.

12. (Previously presented) The medium according to claim 11, wherein each of the ferromagnetic particles represents a separate ferromagnetic domain.

13. (Currently amended) The medium according to claim 11 ~~12~~, wherein the distance between adjacent ferromagnetic ~~domains~~ particles is at least about 2nm.

14. (Currently amended) The medium according to claim 11 ~~12~~, wherein the distance between adjacent ferromagnetic ~~domains~~ particles is no greater than about 10nm.

15. (Currently amended) A magnetic recording device, comprising a magnetic recording medium comprising a magnetizable layer, wherein said magnetizable layer comprises ~~comprising~~ a plurality of substantially uniformly spaced apart ferromagnetic particles,

each particle having a largest dimension no greater than about 100nm, and a coating surrounding each of said plurality of particles.

16. (Previously presented) The device according to claim 15, wherein said coating is selected from the group consisting of micelles and surfactants.

17. (Currently amended) A magnetic recording device, comprising a magnetic recording medium comprising a magnetizable layer, wherein said magnetizable layer comprises a plurality of ferromagnetic particles each having a largest dimension no greater than about 100nm, and wherein each of the ferromagnetic particles has been formed ~~are at least partially encased~~ within a cavity of an organic macromolecule.

18. (Previously presented) The device according to claim 17, wherein each of the ferromagnetic particles represents a separate ferromagnetic domain.

19. (Currently amended) The device according to claim 17 ~~18~~, wherein the distance between adjacent ferromagnetic ~~domains~~ particles is at least about 2nm.

20. (Currently amended) The device according to claim 17 ~~18~~, wherein the distance between adjacent ferromagnetic ~~domains~~ particles is no greater than about 10nm.

21. (Cancelled)

22. (Currently amended) A method for creating a magnetizable layer comprising the steps of:

~~creating~~ forming a plurality of ferromagnetic particles within a respective plurality of organic macromolecules, each ferromagnetic particle having a largest dimension no greater than about 100nm, and

depositing said plurality of ferromagnetic particles on a surface.

23-24. (Cancelled)

25. (New) The data storage medium of claim 11, wherein the largest dimension of each particle of said plurality of ferromagnetic particles varies by no more than about 5%.

26. (New) The data storage medium of claim 11, wherein the largest dimension of each particle of said plurality of ferromagnetic particles is no greater than about 50 nm.

27. (New) The data storage medium of claim 26, wherein the largest dimension of each particle of said plurality of ferromagnetic particles is no greater than about 25 nm.

28. (New) The data storage medium of claim 11, wherein said cavity of said organic macromolecule is of a substantially uniform predetermined size and shape.

29. (New) The data storage medium of claim 11, wherein the ferromagnetic particles are selected from the group of metals consisting of: cobalt, platinum, iron, and nickel.

30. (New) The data storage medium of claim 11, wherein the ferromagnetic particles comprise an alloy of two or more metals selected from the group consisting of: aluminum, barium, bismuth, cerium, chromium, cobalt, copper, iron, manganese,

molybdenum, neodymium, nickel, niobium, platinum, praseodymium, samarium, strontium, titanium, vanadium, ytterbium, and yttrium.

31. (New) The magnetic recording device of claim 15, wherein the largest dimension of each particle of said plurality of ferromagnetic particles varies by no more than about 5%.

32. (New) The magnetic recording device of claim 15, wherein the largest dimension of each particle of said plurality of ferromagnetic particles is no greater than about 50 nm.

33. (New) The magnetic recording device of claim 32, wherein the largest dimension of each particle of said plurality of ferromagnetic particles is no greater than about 25 nm.

34. (New) The magnetic recording device of claim 15, wherein the ferromagnetic particles are selected from the group of metals consisting of: cobalt, platinum, iron, and nickel.

35. (New) The magnetic recording device of claim 15, wherein the ferromagnetic particles comprise an alloy of two or more metals selected from the group consisting of: aluminum, barium, bismuth, cerium, chromium, cobalt, copper, iron, manganese, molybdenum, neodymium, nickel, niobium, platinum, praseodymium, samarium, strontium, titanium, vanadium, ytterbium, and yttrium.

36. (New) The magnetic recording device of claim 17, wherein the largest dimension of each particle of said plurality of ferromagnetic particles varies by no more than about 5%.

37. (New) The magnetic recording device of claim 17, wherein the largest dimension of each particle of said plurality of ferromagnetic particles is no greater than about 50 nm.

38. (New) The magnetic recording device of claim 37, wherein the largest dimension of each particle of said plurality of ferromagnetic particles is no greater than about 25 nm.

39. (New) The magnetic recording device of claim 17, wherein said cavity of said organic macromolecule is of a substantially uniform predetermined size and shape

40. (New) The magnetic recording device of claim 15, wherein the ferromagnetic particles are selected from the group of metals consisting of: cobalt, platinum, iron, and nickel.

41. (New) The magnetic recording device of claim 15, wherein the ferromagnetic particles comprise an alloy of two or more metals selected from the group consisting of: aluminum, barium, bismuth, cerium, chromium, cobalt, copper, iron, manganese, molybdenum, neodymium, nickel, niobium, platinum, praseodymium, samarium, strontium, titanium, vanadium, ytterbium, and yttrium.

42. (New) The method of claim 22, wherein the largest dimension of each particle of said plurality of ferromagnetic particles varies by no more than about 5%.

43. (New) The method of claim 22, wherein the step of forming a plurality of ferromagnetic particles within a respective plurality of organic macromolecules comprises depositing metal films into tubular centers of a two-dimensional array of flagellar L-P rings.